

REMARKS

Claims 1-3, 6, 8, 9, 11, 12, 14, 15, 17-26, 28 and 29 are pending. By this Amendment, claims 1, 11, 15, 17 and 18 and the specification are amended, claims 28 and 29 added and claims 10, 13, 16 and 27 canceled without prejudice to, or disclaimer of, the subject matter recited therein. Support for the amendments to claims 1, 11, 15, 17 and 18 can be found in the specification at, for example, page 23, line 16 - page 24, line 14 and page 25, line 8 - page 26, line 7. The specification is amended for form. Support for new claims 28 and 29 can be found at least in original claims 8 and 9. No new matter is added.

The specification is objected to for informalities. By this Amendment, the specification is amended responsive to the objection. Applicants thus respectfully request withdrawal of the objection.

Claims 10, 13 and 27 are rejected under 35 U.S.C. §112, first and second paragraphs. The rejection of claims 10, 13 and 27 is moot in view of the cancellation of claims 10, 13 and 27. Applicants thus respectfully request withdrawal of the rejection.

Claims 1, 11, 15, 17 and 18 are rejected under 35 U.S.C. §103(a) over Reiji et al. (JP 04-002118) in view of Kobori et al. (U.S. Patent No. 5,743,967). The rejection is respectfully traversed.

Reiji and Kobori, alone or in any permissible combination, do not teach or render obvious every claimed feature of independent claims 1, 11, 15, 17 and 18. Reiji and Kobori do not teach or render obvious notches which are formed by notching inner circumferential surfaces of the ring-like plates, the inner circumferential surfaces being opposite to the support columns, on a periphery of the support columns, the support columns being fitted into the notches, as recited in independent claims 1, 11, 15, 17 and 18.

Reiji merely relates to a wafer board 7 where a baffle plate 30 has a larger outer diameter than that of the wafer 6 to allow the wafer 6 to rest on the baffle plate 30 (see Figs. 5

and 8 of Reiji). The Office Action asserts that Reiji discloses the previously claimed support columns in Fig. 5 (see Office Action, page 4). However, as shown in Fig. 5 of Reiji, these alleged columns 10 are formed in the middle of the body of the ring-shaped baffle plate 30. Therefore, Reiji does not teach or suggest notches formed by notching the inner circumferential surface of a ring-like plate and support columns fitted into the notches, as recited in independent claims 1, 11, 15, 17 and 18.

Kobori does not remedy the above-described deficiencies of Reiji. The Office Action asserts that the cutouts 402 and boat pillars 103 of Kobori correspond to the notches and support columns as previously recited in independent claims 1, 11, 15, 17 and 18 (see Office Action, pages 5 and 6). However, as seen in Fig. 4A of Kobori, the boat pillars 403 are separate from the cutouts 402, and not fitted therein. Indeed, the boat pillars 403 and 413 are provided on the outer circumferential surfaces of the corrective frames 401 and 411 (see Fig. 4A of Kobori). Therefore, Kobori also does not teach or suggest notches formed in the inner circumferential surfaces of the ring-like plates, the support columns being fitted into the notches, as recited in independent claims 1, 11, 15, 17 and 18.

Therefore, for at least these reasons, independent claims 1, 11, 15, 17 and 18 are patentable over the alleged combination of Reiji and Kobori. Applicants thus respectfully request withdrawal of the rejection.

Claims 2, 6 and 19-26 are rejected under 35 U.S.C. §103(a) over Reiji in view of Kobori and further in view of Minami et al. (JP 2001-168175); and claim 3 is rejected under 35 U.S.C. §103(a) over Reiji in view of Kobori and further in view of Minami and Osaka et al. (U.S. Patent Application Publication No. 2002/0070095). The rejections are respectfully traversed.

Minami and Osaka do not remedy the above-described deficiencies of Reiji and Kobori. Minami is applied by the Office Action only for its alleged teaching of substrate

mounting portions (see Office Action, page 7). Osaka is applied by the Office Action only for its alleged teaching of substrate mounting portions being inclined downward toward an inside of the ring-like plates in a diameter direction (see Office Action, page 8). Further, claims 2, 3, 6 and 19-26 variously depend from independent claims 1, 11 and 15. Therefore, claims 1, 2, 6 and 19-26 are patentable for at least their dependency on independent claims 1, 11 and 15, as well as for the additional features they recite. Applicants thus respectfully request withdrawal of the rejections.

Claims 8, 9, 12 and 14 are rejected under 35 U.S.C. §103(a) over Reiji in view of Kobori and further in view of Ishii et al. (U.S. Patent No. 5,820,683). The rejection is respectfully traversed.

Reiji, Kobori and Ishii, alone or in any permissible combination, do not teach or render obvious every claimed feature of claims 8, 9, 12 and 14. Reiji and Kobori do not teach or render obvious the support columns are composed into an approximately semi-columnar shape, as recited in claims 8 and 12.

The Office Action acknowledges that Reiji and Kobori do not teach the above feature (see Office Action, page 9). However, the Office Action asserts that Ishii teaches the use of semi-columnar support columns at Fig. 5 (see Office Action, page 9). Applicants respectfully traverse this assertion.

As acknowledged on page 9 of the Office Action, Ishii teaches the use of semi-cylindrical support columns, and not semi-columnar support columns (see Fig. 5 of Ishii). Further, the alleged semi-columnar support column of Ishii is actually a plurality of support columns 35A, 35B, 35C and 35D that are collectively formed into a semi-cylindrical shape (see Fig. 5 of Ishii). Each individual support column 35A, 35B, 35C and 35D is neither formed into a semi-columnar shape nor formed into a semi-columnar shape. Therefore, Ishii

also does not teach or render obvious support columns that are composed into an approximately semi-columnar shape, as recited in claims 8 and 12.


The Office Action further asserts that Ishii "teaches the use of semi-columnar support columns ... in place of three support columns ... which tends to generate slips ... in order to provide larger contact area (through the ring 36) with wafer in order to reduce the slip formation" at col. 1, lines 27-32, 47-54, 56-60 and col. 3, lines 9 and 10 (see Office Action, page 9). However, the cited passages of Ishii provide no disclosure or even suggestion of a problem with slip between the wafer and the support column. Rather, Ishii merely teaches a slip problem between the wafer W and the portion supporting the wafer (see col. 1, lines 47-54 and Fig. 1 of Ishii). Therefore, one of ordinary skill would not have been motivated to modify the semi-cylindrical support columns 35A, 35B, 35C and 35D to achieve the claimed semi-columnar support columns. Accordingly, Ishii does not teach or render obvious semi-columnar support columns, as recited in claims 8 and 12.

Therefore, for at least these reasons, claims 8 and 12 are patentable over any alleged combination of Reiji, Kobori and Ishii. Claims 9 and 14, which respectively depend from claims 8 and 12 are also patentable over Reiji, Kobori and Ishii, for at least their dependency on claims 8 and 12, as well as for the additional features they recite. Applicants thus respectfully request withdrawal of the rejection.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Attachment:
Petition for Extension of Time

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